

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A polymer gel composition, comprising:

at least two polymer compounds which interact with each other to form a polymer complex, and

a liquid;

wherein:

only one of the polymer compounds forms a three-dimensional crosslinked structure, wherein the three-dimensional crosslinked structure is in a particle shape, and wherein the particles of the three-dimensional cross-linked structure are dispersed in the liquid;

at least one other polymer compound is ~~at least partially~~ soluble in the liquid; and

at least a portion of the ~~at least partially~~ soluble polymer compound is included in the three-dimensional crosslinked structure.

2. (Previously Presented) The polymer gel composition according to claim 1, wherein the polymer complex is reversibly disassembled by a stimulus so that the polymer compound forming the three-dimensional crosslinked structure exhibits a change in volume by absorbing or releasing the liquid.

3. (Canceled)

4. (Previously Presented) The polymer gel composition according to claim 2, wherein the stimulus is heat.

5. (Previously Presented) The polymer gel composition according to claim 1, wherein the polymer complex has a phase transition temperature of -5°C to 80°C.

6. (Previously Presented) The polymer gel composition according to claim 1, wherein at least one of the polymer compounds forming the polymer complex includes a carboxylic amide group, and at least one other polymer compounds includes a carboxyl group.

7. (Previously Presented) The polymer gel composition according to claim 1, wherein the polymer compound forming the three-dimensional crosslinked structure has at least one ionic substituent.

8–10. (Canceled)

11. (Previously Presented) The polymer gel composition according to claim 1, wherein the polymer compound forming the three-dimensional crosslinked structure includes a light-modulating material.

12. (Currently Amended) An optical device, comprising a polymer gel composition, the polymer gel comprising:

at least two polymer compounds which interact with each other to form a polymer complex; and

a liquid;

wherein:

only one of the polymer compounds forms a three-dimensional crosslinked structure;

at least one other polymer compound is ~~at least partially~~ soluble in the liquid;

and

at least a portion of the ~~at least partially~~ soluble polymer compound is included in the three-dimensional crosslinked structure.

13. (Currently Amended) An optical device, comprising: a pair of substrates; and a polymer gel composition disposed between the pair of substrates, ends to the substrates being sealed, wherein

the polymer gel composition comprises: at least two polymer compounds which interact with each other to form a polymer complex; and a liquid, and only one of the polymer compounds forms a three-dimensional crosslinked structure;

at least one other polymer compound is ~~at least partially~~ soluble in the liquid; and

at least a portion of the ~~at least partially~~ soluble polymer compound is included in the three-dimensional crosslinked structure.

14–16. (Canceled)